

provider--.

Page 13, line 6, change "the connection server 26" to --a connection service provider--.

In the Claims

Please amend the claims as follows:

22. (Amended) A computer program product for use with a computer system, the computer system having first processor operatively coupled to a second processor [and second processors] and a server [operatively coupled] over a computer network, the computer program product comprising:

a computer useable medium having program code means embodied in the medium for establishing a point-to-point communications link between the first processor and a second processor over a computer network, the medium further comprising:

program code means for transmitting an E-mail signal comprising a network protocol address [from] of the first processor to the second processor [server] over the computer network;

program code means for receiving a second network protocol address from the second processor over the computer network; and

program code means, responsive to the second network protocol address, for establishing a point-to-point communication link between the first processor and the second processor over a computer network.

42. (Amended) The method of claim 41 wherein [the elements generated in steps A and B are graphic elements and] the step of establishing a [point-to-communication] point-to-point link as described in step C is performed in response to a user manipulating the graphic elements on the graphic user interface.

Please add the following claims:

54. A method of locating a user over a computer network comprising the steps of :

- a. maintaining an Internet accessible list having a plurality of entries, each entry comprising an electronic mail address and a corresponding Internet protocol address for a process currently connected to the Internet; and
- b. in response to identification of one of the list entries by a requesting process, providing one of the electronic mail address and the corresponding Internet protocol address of the identified entry to the requesting process.

55. A method for locating users having dynamically assigned network protocol addresses over a computer network, the method comprising the steps of:

- a. maintaining in a computer memory, a network accessible compilation of entries, each entry comprising a network protocol address and a corresponding identifier for a user connected to the computer network;
- b. in response to identification of one of the entries by a requesting process providing one of the identifier and the network protocol address to the requesting process.

56. The method of claim 55 further comprising the step of:

- c. modifying the compilation of entries.

57. The method of claim 56 wherein step c further comprises:

- c.1 adding an entry to the compilation upon the occurrence of a predetermined event.

58. The method of claim 57 wherein the predetermined event comprises notification by a user process of an assigned network protocol address.

59. The method of claim 56 wherein step c further comprises:
c.1 deleting an entry from the compilation upon the occurrence of a predetermined event.

60. A computer program product for use with a server apparatus operatively coupled over a computer network to one or more computer processes, the computer program product comprising a computer usable medium having program code embodied in the medium the program code comprising:

a. program code configured to maintain, in a computer memory, a network accessible compilation of entries, each entry comprising a network protocol address and a corresponding identifier for a process connected to the computer network; and

b. program code responsive to identification of one of the entries by a requesting process and configured to provide one of the identifier and the network protocol address to the requesting process.

61. The computer program product of claim 60 further comprising:

c. program code configured to modify the compilation of entries.

62. The computer program product of claim 61 wherein program code configured to modify comprises:

c.1 program code configured to add an entry to the compilation upon the occurrence of a predetermined event.

63. The computer program product of claim 62 wherein the predetermined event comprises notification by a process of an assigned network protocol address.

64. The computer program product of claim 60 wherein step c further

comprises:

c.1 program code configured to delete an entry from the compilation upon the occurrence of a predetermined event.

65. A computer program product for use with a server operatively coupled over a computer network to a plurality of processes, the computer program product comprising a computer usable medium having program code embodied thereon the program code comprising:

- a. program code configured to receive the current network protocol address of one of the processes coupled to the network;
- b. program code configured to receive an identifier associated with said one process, and
- c. program code configured to receive queries for one of the network protocol address and the associated identifier of said one process from other processes over the computer network.

66. A computer program product for use with a computer system, the computer system including a first process operatively coupled over a computer network to a second process and a server process, the computer program product comprising a computer usable medium having computer readable program code embodied therein, the program code means comprising:

- a. program code configured to access a directory database, the database having a network protocol address for a plurality of processes having on-line status with respect to the computer network; and
- b. program code responsive to one of the network protocol addresses and configured to establish a point-to-point communication link from the first process to the second process over the computer network.

67. In a first computer process operatively coupled over a computer network to a second process and an address server, a method of establishing a point-to-point communication between the first and second processes comprising the steps of:

- A. querying the address server as to whether the second process is connected to the computer network;
- B. receiving a network protocol address of the second process from the address server, when the second process is connected to the computer network; and
- C. in responsive to the network protocol address of the second process, establishing a point-to-point communication link with the second process over the computer network.

68. In a first computer process operatively coupled over a computer network to a second process and an E-mail server, a method of establishing a point-to-point communication between the first and second processes comprising the steps of:

- A. transmitting an E-mail signal comprising a network protocol address of the first process to the second process over the computer network;
- B. receiving a second network protocol address from the second process over the computer network; and
- C. in responsive to the second network protocol address, establishing a point-to-point communication link between the first process and the second process over a computer network.

REMARKS

Applicant has considered carefully the Office Action dated June 2, 1997 and the references cited therein. In response, the title, specification, and claims have been amended. Applicant respectfully requests reexamination of the application.

The title of the application has now been changed to "METHOD AND APPARATUS FOR ESTABLISHING POINT-TO-POINT COMMUNICATIONS OVER A